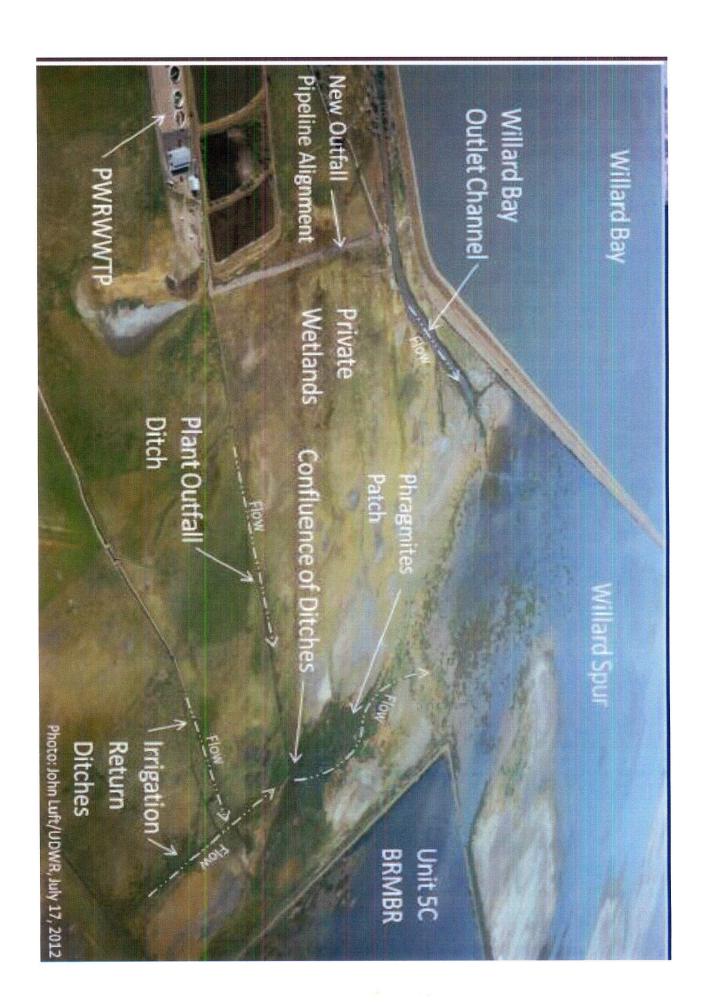
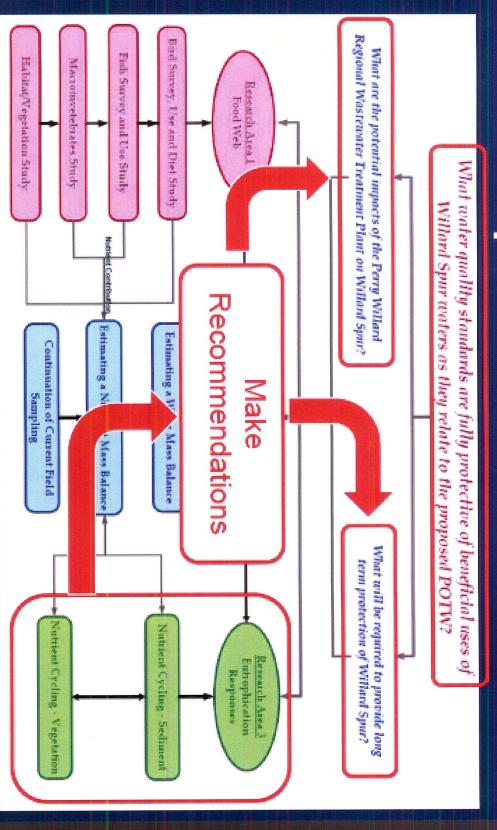
Development of Water Quality Standards for Willard Spur

Wastewater Plant Impacts Update on Evaluation of Perry Willard Regional





Willard Spur Research Plan



Looking at historic and current changes due to nutrients

Looking at potential future changes due to nutrients



- What goals would any recommendations to minimize impacts from the Plant need to achieve?
- Reduce the nutrient concentration and load
- Reduce the quantity of water and load
- Minimize incidence of discharge
- If discharge, maximize the peak of discharge to minimize period of discharge

Options to Consider for the Plant

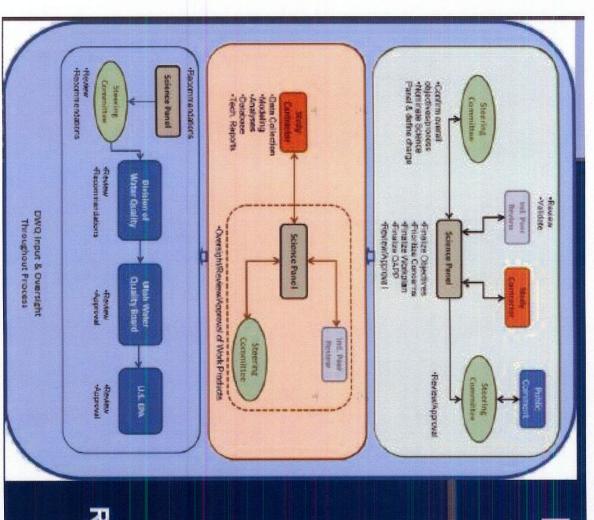
- Modify UPDES permit to define discharge locations
- Maintain chemical phosphorus removal
- Discharge to private property/pasture
- Formalize agreement with landowner
- Land application requirements/permits – Water management plan



Options to Consider for the Plant

- Re-purpose State Park Lagoons
- Connect State Park to the Plant
- Storage/evaporation of effluent
- Nutrient reduction
- Will require a management plan
- Constructed Treatment Wetland
- Phragmites control plan





Path to Completion

2011

Plan Formulation

2012-2013

Research & Evaluation

2014

Reporting & Recommendations

